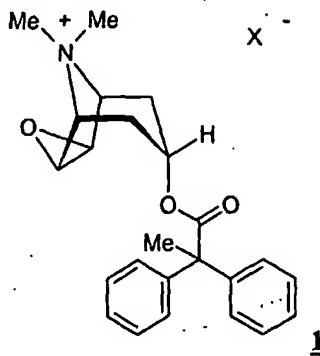


We Claim:

1. A pharmaceutical composition comprising:

(a) an anticholinergic of formula **1**



wherein X⁻ is an anion with a single negative charge;

(b) a corticosteroid; and

(c) a betamimetic,

wherein each component (a), (b), and (c) are optionally in the form of the solvates or hydrates thereof.

2. The pharmaceutical composition according to claim 1, further comprising a physiologically acceptable excipient.

3. The pharmaceutical composition according to claim 2, wherein the physiologically acceptable excipient is a monosaccharide, disaccharide, oligo- or polysaccharide, polyalcohol, salt, or mixture thereof.

4. The pharmaceutical composition according to claim 1, wherein:

X⁻ is selected from the group consisting of: chloride, bromide, iodide, sulfate, phosphate, methanesulfonate, nitrate, maleate, acetate, citrate, fumarate, tartrate, oxalate, succinate, benzoate, and *p*-toluenesulfonate.

5. The pharmaceutical composition according to claim 1, wherein:

X⁻ is selected from the group consisting of: chloride, bromide, methanesulfonate, and *p*-toluenesulfonate.

6. The pharmaceutical composition according to claim 1, wherein X⁻ is bromide.

7. The pharmaceutical composition according to claim 1, wherein the corticosteroid is selected from flunisolide, beclomethasone, triamcinolone, budesonide, fluticasone, mometasone, ciclesonide, rofleponide, GW 215864, KSR 592, ST-126, dexamethasone, and mixtures thereof.

8. The pharmaceutical composition according to claim 1, wherein the corticosteroid is selected from flunisolide, beclomethasone, triamcinolone, budesonide, fluticasone, mometasone, ciclesonide, dexamethasone, and mixtures thereof.

9. The pharmaceutical composition according to claim 1, wherein the betamimetic is selected from bambuterol, bitolterol, carbuterol, clenbuterol, fenoterol, formoterol, hexoprenaline, ibuterol, pirbuterol, procaterol, reproterol, salmeterol, sulfonterol, terbutaline, tolubuterol, 4-hydroxy-7-[2-{{3-(2-phenylethoxy)propyl}sulfonyl}ethyl]amino}ethyl]-2(3*H*)-benzothiazolone, 1-(2-fluoro-4-hydroxyphenyl)-2-[4-(1-benzimidazolyl)-2-methyl-2-butylamino]ethanol, 1-[3-(4-methoxybenzylamino)-4-hydroxyphenyl]-2-[4-(1-benzimidazolyl)-2-methyl-2-butylamino]ethanol, 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[3-(4-*N,N*-dimethylaminophenyl)-2-methyl-2-propylamino]ethanol, 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[3-(4-methoxyphenyl)-2-methyl-2-propylamino]ethanol, 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[3-(4-*n*-butyloxyphenyl)-2-methyl-2-propylamino]ethanol, 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-{4-[3-(4-methoxyphenyl)-1,2,4-triazol-3-yl]-2-methyl-2-butylamino}ethanol, 5-hydroxy-8-(1-hydroxy-2-isopropylaminobutyl)-2*H*-1,4-benzoxazin-3-(4*H*)-one, 1-(4-amino-3-chloro-5-trifluoromethylphenyl)-2-*tert*-butylamino)ethanol, 1-(4-ethoxycarbonylamino-3-cyano-5-fluorophenyl)-2-(*tert*-butylamino)ethanol, and mixtures thereof.

10. The pharmaceutical composition according to claim 1, wherein the betamimetic is selected from formoterol, salmeterol, 4-hydroxy-7-[2-{[2-{[3-(2-phenylethoxy)propyl]sulfonyl}ethyl]amino}ethyl]-2(3*H*)-benzothiazolone, 1-(2-fluoro-4-hydroxyphenyl)-2-[4-(1-benzimidazolyl)-2-methyl-2-butylamino]ethanol, 1-[3-(4-methoxybenzylamino)-4-hydroxyphenyl]-2-[4-(1-benzimidazolyl)-2-methyl-2-butylamino]ethanol, 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[3-(4-*N,N*-dimethylaminophenyl)-2-methyl-2-propylamino]ethanol, 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[3-(4-methoxyphenyl)-2-methyl-2-propylamino]ethanol, 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[3-(4-*n*-butyloxyphenyl)-2-methyl-2-propylamino]ethanol, 1-[2*H*-5-hydroxy-3-oxo-4*H*-1,4-benzoxazin-8-yl]-2-[4-{3-(4-methoxyphenyl)-1,2,4-triazol-3-yl}-2-methyl-2-butylamino]ethanol, and mixtures thereof.

11. The pharmaceutical composition according to one of claims 1 to 10, wherein the weight ratio of the anticholinergic in the form of its cation to the corticosteroid is in the range from 1:250 to 250:1.

12. The pharmaceutical composition according to one of claims 1 to 10, wherein the weight ratio of anticholinergic to the betamimetic is in the range from 1:300 to 30:1.

13. The pharmaceutical composition according to one of claims 1 to 10, wherein the total amount of the anticholinergic, the corticosteroid, and the betamimetic is 1 µg to 10000 µg.

14. The pharmaceutical composition according to claim 1, wherein the total amount of the anticholinergic, the corticosteroid, and the betamimetic is 10 µg to 2000 µg.

15. The pharmaceutical composition according to claim 1, wherein the pharmaceutical composition is in a form suitable for inhalation.

16. The pharmaceutical composition according to claim 15, wherein the pharmaceutical composition is an inhalable powder, propellant-containing aerosol composition, or a propellant-free inhalable solution or suspension.

17. The pharmaceutical composition according to one of claims 2 to 10, wherein the pharmaceutical composition is in a form suitable for inhalation.

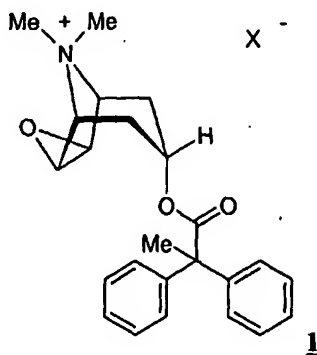
18. The pharmaceutical composition according to one of claims 2 or 3, wherein the pharmaceutical composition is an inhalable powder and the physiologically acceptable excipient has a maximum average particle size of up to 250 μm .

19. The pharmaceutical composition according to claim 18, wherein the physiologically acceptable excipient has a maximum average particle size of between 10 μm and 150 μm .

20. A capsule containing inhalable powder according to claim 18.

21. A pharmaceutical composition consisting essentially of:

(a) an anticholinergic of formula 1



wherein X⁻ is an anion with a single negative charge;

(b) a corticosteroid; and

(c) a betamimetic,

wherein each component (a), (b), and (c) are optionally in the form of the solvates or hydrates thereof.

22. The pharmaceutical composition according to claim 16, wherein the pharmaceutical composition is a propellant-containing aerosol composition containing the anticholinergic, the corticosteroid, and the betamimetic in dissolved or dispersed form.

23. The propellant-containing aerosol composition according to claim 22, wherein the propellant gas is a hydrocarbon or halohydrocarbon or a mixture thereof.

24. The propellant-containing aerosol composition according to claim 23, wherein the propellant gas is selected from *n*-propane, *n*-butane, isobutane, or the chlorinated and/or fluorinated derivatives of methane, ethane, propane, butane, cyclopropane, or cyclobutane, or a mixture thereof.

25. The propellant-containing aerosol composition according to claim 22, wherein the propellant gas is TG134a, TG227, or a mixture thereof.

26. The propellant-containing aerosol composition according to one of claims 22 to 25, further comprising a cosolvent, stabilizer, surfactant, antioxidant, lubricant, or means for adjusting the pH, or mixture thereof.

27. The propellant-containing aerosol composition according to one of claims 22 to 25, wherein the total amount of the anticholinergic, the corticosteroid, and the betamimetic is up to 5 wt.-% of the composition.